REMARKS

1.   In response to the Office Action mailed August 17, 2006, Applicants respectfully request reconsideration. Claims 1-28 were originally presented for examination. All outstanding claims were rejected in the outstanding Office Action. By the foregoing Amendments, claims 1, 3, 8, 11, 13, 18, 20, 24, 25, 27 and 28 have been amended. Claims 2 and 12 have been cancelled. No new claims have been added. Thus, upon entry of this paper, Claims 1, 3-11, and 13-28 will be pending in this application. Of these twenty-six (26) claims, four (4) claims (claims 1, 11, 23 and 27) are independent. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

2.   Support for the amendments to claim 1, 3, 8, 11, 13, 18, 24, 25, 27 and 28 may be found in paragraphs 52 and 56 of the originally filed Application, as well as elsewhere in the text, drawings, and claims of that originally filed Application. No new matter has been added.

3.   Support for the amendment to claim 20 can be found in the text, drawings and claims of the Application, as originally filed. The amendment to claim 20 has been made to clarify Claim 20. No new matter has been added.

Art of Record

4.   Applicants acknowledge receipt of form PTO-892 identifying additional references made of record by the Examiner.

5.   Applicants acknowledge receipt of the form PTO-1449 filed by Applicant on April 22, 2004, which has been initialed by the Examiner indicating consideration of the references cited therein.

Drawings

6.   Applicants note with appreciation the Examiner's indication that the drawings filed on April 22, 2004 have been accepted for examination purposes.

Oath/Declaration

7.   Applicants note with appreciation the Examiner's indication that the oath/declaration filed on April 22, 2004 has been found to conform to the requirements prescribed in 37 C.F.R. §1.63.

Examiner Interviews

8.   Applicants thank the Examiner for the courtesies extended in the telephonic interviews conducted on October 23, 2006. A summary of the interviews is included in the following Remarks.

Rejection of Claim 22, Under 35 U.S.C. §112, Second Paragraph

9.   Dependent claim 22 has been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully submit that claim 20 has been presently amended to clarify claim 20 as well as claim 22. As the grounds for this rejection is no longer present, Applicants respectfully request that this rejection be reconsidered and withdrawn.

Rejection of Claims 1, 11, 23 and 27 under 35 U.S.C. §102(b) over Brown

10.   Independent claims 1, 11, 23, 27 and dependent claims 2-6, 8, 10, 12-16, 18, 20, 24-26, 28 have been rejected under 35 U.S.C. §102(b) as being clearly anticipated by U.S. Patent No. 5,568,610 to Brown (hereinafter, "Brown").   Based on the above amendments and following remarks, Applicants respectfully requests that these rejections be reconsidered, and that they be withdrawn.

11.   Claims 1 and 11, as currently amended, claims a mating detection circuit and mating detector, respectively, "of an expansion card... comprising... at least one FET configured to monitor at least one signal..." (*See*, Claims 1, 11.)   Claim 27 claims a "method for

determining whether a connector of an expansion card is mated with a corresponding connector... comprising...monitoring...with at least one FET used for said monitoring..." (*See*, Claim 27.) Claim 23 claims a means for monitoring, the structure for which is described in Applicants' text, drawings, and other parts of the Application, as originally filed.

12.   Unlike claims 1, 11, 23 and 27, Brown fails to disclose, teach or suggest using a FET for monitoring the mating status of the expansion card. To the contrary, the detection system of Brown senses the insertion of an expansion card with a "capacitive sensing" approach, using conductive plates and "at least one variable frequency oscillator." (*See*, Brown, abstract, col. 2, ll. 52, 59.) In Brown, capacitive plates 118, 120 in the expansion card capacitively couple to 112, 113 (or pin 114) when the expansion card is inserted or removed from the edge connector 102, causing the frequency monitored by the oscillators 122, 128 to change. (*See*, Brown, col. 5, ll. 18-49, col. 7, ll. 32-34.) In Brown, "a processor continuously monitors the frequency of the oscillator and determines insertion or removal based on the oscillation frequency." (*See*, Brown, col. 3, ll. 5-8.) Thus, Brown fails to teach all limitations of claims 1, 11, 23 and 27, as currently amended, and therefore cannot serve to anticipate claims 1, 11, 23 and 27.

13.   Applicants note that FETs are used in Brown to turn off power between the expansion card being removed and the edge connector from which it is being removed. One of the problems being addressed by Brown is the necessity of having to shut down a computer or server before an expansion card is installed or removed. (*See*, Brown, col. 1, ll. 24-28, 34-37, 51-53, 57-59.) According to Brown, without shutting down the computer or server, sudden removal of an expansion cards "may cause data glitches causing erroneous operation." (*See*, Brown, col. 1, ll. 41-44.) Brown discloses avoiding this problem by having a control circuit which isolates, or puts into a neutral state, the data pins and control FETs to shut down power to power pins. (*See*, Brown, col. 8, l. 58 – col. 9, l. 12.) By removing data and power from the data pins, insertion or removal of the expansion card from an edge connector will not impact the pins of the edge connector, and are thus supposed to avoid the problem of data glitches being introduced from the insertion or removal of the expansion card. Brown does not teach or suggest using FETs to monitor signals as a way of detecting the insertion or removal of cards, nor for determining the mating status of an expansion card with a card connector. Thus, even with Brown disclosing the use of FETs for an unrelated purpose, Brown fails to teach or suggest all features or limitations of Claims 1, 11 23, and 27.

14.   Accordingly, for at least the reasons above, Applicants respectfully request that the above rejection be reconsidered, and withdrawn.
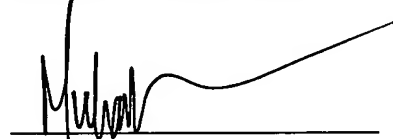
Dependent Claims

15.   The dependent claims incorporate all of the subject matter of their respective independent claims and add additional subject matter which makes them *a fortiori* independently patentable over the art of record. Accordingly, Applicant respectfully requests that the outstanding rejections of the dependent claims be reconsidered and withdrawn.

Conclusion

16.   In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

Respectfully submitted,

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October 27, 2006